1. Airplane
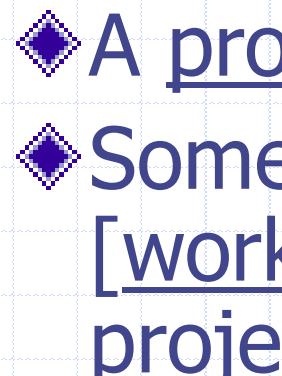
- Each airplane has a unique registration number [regNum].
- A hangar has a location [location] and a unique number [hangerNum].
- An airplane can be stored in one hangar [stored_in] when needed. One hanger can store zero, or one or more than one airplane at any give time.

- An <u>owner</u> owns [<u>owns</u>] at least one airplanes. A airplane must be owned by at least one owner.
- A owner can be categorized into two types: <u>corporation</u> and <u>person</u>.
- A corporation has an address [<u>address</u>] and a unique name [<u>name</u>]. Not all corporations are owners of an airplane.
- A person has a name [<u>name</u>] and a unique ssn [<u>ssn</u>]. Not all persons are owners.

2. Faculty and project

◆ An <u>employee</u> has a name [<u>name</u>] and a unique ssn [<u>ssn</u>].

◆ Two types of employees: <u>faculty</u> with a rank [<u>rank</u>] and <u>staff</u> with a position description [<u>position</u>]. (There can be other types of employees) (A staff member cannot be a faculty member).

- A project has a unique project ID [pId].
- Some faculty members work on [works_on] one or more than one project. A project must related to at least one faculty member.
- We also need to keep track of how many hours [hours] a faculty member works on a given project.

- Some projects are sponsored by [sponsored_by] one or more than one sponsors. A sponsor must support at least one project.

- A sponsor [sponsor] can be a government agency, or a company.

- A government agency has a unique agency Id [agencyId]. Not all government agencies are sponsors.

- A company has a name [name] and a unique registration id [companyId]. Not all companies are sponsors.